CLAIMS

What is claimed is:

1. 1. A method for performing textured mapping of a target area, the method
2. comprising the steps of:
3. receiving input that defines a texture image; and
4. covering the target area in an aperiodic tiling pattern with tiles generated from
5. said texture image.

2. The method of Claim 1, wherein the step of receiving input that defines the
2. texture image includes the step of scanning one or more texture images into
3. memory.

1. 3. The method of Claim 1, wherein the step of covering the target area includes the
2. steps of:
3. selecting an aperiodic tiling pattern;
4. generating a set of textured tiles based on said aperiodic tiling pattern; and
5. applying the textured tiles to the target area.

1. 4. The method of Claim 3, wherein the step of applying the textured aperiodic tiles
2. to the target area includes the steps of:
3. covering the target area with one or more aperiodic tiles, wherein the one or more
4. aperiodic tiles are based on the aperiodic tiling pattern; and
5. mapping a corresponding textured tile to each of the one or more aperiodic tiles.

1. 5. The method of Claim 3, wherein the step of applying the textured tiles to the
2. target area includes the steps of:
3. generating a tiling, wherein the tiling is associated with tiles based on said
4. aperiodic tiling pattern; and

5 covering the target area with said tiling; and

6 mapping the textured tiles to the tiles associated with said tiling.

1 6. The method of Claim 5, wherein the step of generating the tiling includes the

2 steps of:

3 determining a substitution tiling level; and

4 performing a tiling substitution based on said substitution tiling level to generate

5   said tiling.

1 7. The method of Claim 1, wherein the step of receiving input that defines the

2 texture image includes the step of generating the texture image using a computer

3 aided drawing program.

1 8. A computer-readable medium carrying one or more sequences of instructions for

2 performing textured mapping of a target area, wherein execution of the one or

3 more sequences of instructions by one or more processors causes the one or more

4 processors to perform the steps of:

5 receiving input that defines a texture image; and

6 covering the target area in an aperiodic tiling pattern with tiles generated from

7   said texture image.

1 9. The computer-readable medium of Claim 8, wherein the step of receiving input

2 that defines the texture image includes the step of scanning one or more texture

3 images into memory.

1 10. The computer-readable medium of Claim 8, wherein the step of covering the

2 target area includes the steps of:

3 selecting an aperiodic tiling pattern;

4 generating a set of textured tiles based on said aperiodic tiling pattern; and

5 applying the textured tiles to the target area.

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1 11. The computer-readable medium of Claim 10, wherein the step of applying the

2 textured aperiodic tiles to the target area includes the steps of:

3 covering the target area with one or more aperiodic tiles, wherein the one or more

4 aperiodic tiles are based on the aperiodic tiling pattern; and

5 mapping a corresponding textured tile to each of the one or more aperiodic tiles.

1 12. The computer-readable medium of Claim 10, wherein the step of applying the

2 textured tiles to the target area includes the steps of:

3 generating a tiling, wherein the tiling is associated with tiles based on said

4 aperiodic tiling pattern; and

5 covering the target area with said tiling; and

6 mapping the textured tiles to the tiles associated with the tiling.

1 13. The computer-readable medium of Claim 8, wherein the step of receiving input

2 that defines the texture image includes the step of generating the texture image

3 using a computer aided drawing program.

1 14. The computer-readable medium of Claim 12, wherein the step of generating the

2 tiling includes the steps of:

3 determining a substitution tiling level; and

4 performing a tiling substitution based on said substitution tiling level to generate

5 said tiling.

1 15. A system for performing textured mapping of a target area, the system

2 comprising:

3 a display screen;

4 a target area on said display screen;

5 memory storing a textured image; and

6   a plurality of texture tiles generated from said texture image and arranged on said

7   screen display in an aperiodic pattern that substantially covers said target

8   region.

ADD A4

ADD C1

ADD B7

add E1